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MASSACHUSETTS DEPARTMENT

OF PUBLIC HEALTH

UPDATE

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MASSACHUSETTS
DEPARTMENT OF
PUBLIC HEALTH

June 30, 1977

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Commissioner of Public Health
Chairman, Public Health Council

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Highlights

Fiscal year 1977 marked the first full year in which the Department functioned as the federally designated State Health Planning and Development Agency (SHPDA) under the terms of P.L. 93-641, the National Health Planning and Resources Development Act of 1974. The Office of State Health Planning also completed its first full year as an integrated unit within the Department of Public Health. Responsible for the preparation of a State Health Plan, the Office of State Health Planning worked with other organizations in the health field to develop a Statewide Health Coordinating Council and to assist the latter in the review of the state medical facilities plan. When completed, the State Health Plan will list statewide priorities, goals and objectives for an integrated health-care system.

Strengthening the cooperative ventures begun in the previous year among other agencies within the Office of Human Services, the Department moved ahead to consolidate hospitals of the Department of Mental Health with those of Public Health. The providing of both inpatient and outpatient services to the mentally ill, the mentally retarded and to inmates from the state's correctional institutions in the Department's public health hospitals improved the quality of care, and at a savings to the Commonwealth.

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In reevaluating its priorities for the next period, the Department stressed the importance of health promotion and disease prevention programs. The first step was the physical and programmatic consolidation of Local Health Services and the Office of Health Education into one unit, the Division of Preventive Medicine. With the issuance of a position paper, "A Program for Prevention in Massachusetts," the Department launched a major program of health promotion and primary prevention. Demonstration projects in selected areas of prevention and in selected communities were operative during the year: a child automobile-restraint program in community hospitals to counsel new mothers to use appropriate child restraints in automobiles; hypertension projects in schools and hospitals; and a mass media project in cooperation with a major TV channel, which began with a survey of health attitudes in four Massachusetts communities. In these programs, the Department has encouraged the involvement of civic groups and local boards of health in community-based programs to alter individual lifestyles that are injurious to health.

Emphasis has also been placed on preventive programs that are the responsibility of government, such as, preventive dentistry, handgun control, product safety and communicable diseases.

Technological and social changes have led to a significant increase in the Department of Public Health's programs and activities. Yet, many of the difficult

problems with which the Department still has to contend are those it has confronted since its organization over 100 years ago — adulteration of food supplies, contamination of the environment, increased incidence of some communicable diseases, development of ambulatory and emergency care, rational use of medical manpower, and greater emphasis on preventive medicine.

The concern with both individual and governmental measures to protect the health of the population is not new. The Eighth Annual Report of the Massachusetts State Board of Health, published in 1877, stated in its general introduction:

"Personal hygiene must, it is true, supplement laws protecting the public health; but without such laws, in many cases, no care on the part of individuals can save them from fatal diseases. Very few States, unfortunately, if indeed any, fully recognize their responsibility in this matter, and we are still very far from knowing all the causes of even all the 'preventable' diseases, although we have become familiar with some few of them and with many of the circumstances without which others do not occur." (p 10)

This 63rd Annual Report* is, therefore, a brief accounting of the activities of the Department of Public Health during a period of updated, as well as new, approaches to the delivery of health care to the people of the Commonwealth.

* In 1914, the Legislature passed an act dissolving the Massachusetts Board of Health and creating the State Department of Public Health.

1976—1977

New Programs

HEALTH SERVICES



Diversification and broader use of services provided by the Department's seven hospitals continued through fiscal year 1977. Cooperative ventures with other state agencies and among divisions of the Department were strengthened.

As part of a continuing effort to develop a comprehensive program of rehabilitation for patients of all ages, the Lakeville Hospital added an internist, cardiologist, rheumatologist and a psychologist to its staff. For the first time, the hospital had a full-time orthopedic specialist in charge of the surgical program, and a full-time physiatrist to direct the physical medicine programs.

A Pediatric Cardiology Clinic, a cooperative effort of the Lakeville Hospital, the Southeastern Regional Health Office and the Services to Handicapped Children, opened at the hospital. Protocols and a written cardiac clinic procedural guide were developed to insure smooth inter-unit functioning. Physicians from the New England Medical Center staff the clinic.

In March 1977, 84 medical-geriatric patients, as well as nursing and medical staff, were transferred from Boston State Hospital to the Lemuel Shattuck Hospital, which had been designated the Region VI resource for mixed medical and psychiatric-geriatric patients.

Supported by a seed grant of \$25,000 from the City of Boston's Commission on Affairs of the Elderly, the Shattuck has been exploring with Tufts University the feasibility of developing linkages with nursing homes and home-care agencies to provide medical and psychiatric support, consultation services, continuing education, on-site care, and back-up services through the hospital's ambulatory and inpatient units.

The Shattuck completed construction of a 15-bed medical and surgical unit for patients from the Department of Correction's institutions and from county houses of correction. The new unit always operated at full capacity. As a result of joint planning by the Department of Correction and the hospital, weekly outreach clinics were initiated in orthopedics and other specialties at Norfolk, Walpole, Bridgewater and other institutions.

The hospital also began to serve the Greater Roslindale Community Health Center by providing laboratory, radiology and clinical support services through its Outpatient Department. Plans were developed to make medical services available to Mental Health facilities, and to elderly and needy residents of communities surrounding the hospital — Jamaica Plain, Hyde Park, Mattapan, Dorchester, Roxbury, the South End and Mission Hill.

Western Massachusetts Hospital, now recognized as a major regional health resource, enhanced the quality of its medical services for all its patients by recruiting a board-certified surgeon as the Chief of Professional Services, a board-certified oncologist as Chief of Medical Services, a pediatric urologist, and two orthopedic specialists. A new Orthopedic Corrective Surgery Program for adult and pediatric rehabilitation patients increased the number of surgical procedures performed at the hospital.

The hospital initiated a Pediatric Rehabilitation Team of specialists in speech and hearing, occupational therapy, special education and social services to expand its services to handicapped children. Western Massachusetts Hospital also developed a nature trail and outdoor playground to make the wonders of nature available to these children.

Other new programs at the Lemuel Shattuck were: oral surgery for Department of Mental Health patients (230 admissions in 1977); and annual physicals for State Police officers, resulting in a noteworthy reduction in laboratory and radiology fees to the Commonwealth.

The Massachusetts Hospital School, the Department's unique residential school for the physically handicapped but intellectually able child, broadened its role as a statewide community resource center for consultation, training and advocacy for the physically handicapped child. The Hospital School also enlarged its "Day Hop" program to enroll approximately 50 students. These are young people from the surrounding towns who do not require inpatient care, but are able to take advantage of the one-story school built with special architectural features for the physically handicapped child.

In an effort to extend the horizons of the handicapped child, the Hospital School initiated two innovative programs. The "Donovan Experience," so-called after the Donovan Nurses Residence used for the experimental project, allowed senior students successfully to experience living in a residence on their own for four weeks without family or Hospital School staff to supervise them.

Governor Michael S. Dukakis officially opened an Environmental Educational Nature Trail for handicapped children on the Hospital School grounds on November 4, 1976. The first of its kind in the Commonwealth, the nature trail allows the physically

handicapped to explore the wonders of nature along a one and one-quarter mile route. Funded by a \$90,000 federal grant, the project received the support of community volunteers, the Massachusetts National Guard, and the Massachusetts Association for Handicapped Children.

Pondville Hospital, the first state-operated facility for the treatment of cancer in the country, celebrated its 50th anniversary on June 20, 1977. The anniversary year, a pivotal one in the development of the hospital, ushered in several new programs: a new cancer detection and evaluation clinic; co-sponsorship with the Division of Preventive Medicine of a Task Force on Cancer Prevention; a formal affiliation of the Radiology Department with the University of Massachusetts Medical School, and a vigorous public education and cancer prevention program.

As part of its outreach program with community hospitals, Pondville staff members attended biweekly Tumor Board meetings at Norwood Hospital, and monthly Tumor Board meetings at Milford Hospital. Staff members were also instrumental in establishing a weekly oncology clinic at Norwood Hospital.

During the year, Rutland Heights Hospital incorporated the 115-bed Gardner-Athol Psychiatric Unit into the general hospital and was able to resolve the many problems associated with such a change. The hospital increased the effectiveness of its rehabilitative activities by consolidating the physical, occupational, diversional and speech therapy units into one central location.

The hospital also inaugurated an Employee Guidance and Referral Program to assist employees with personal problems that negatively affect the employees' ability to perform their jobs effectively.

Tewksbury Hospital, the oldest and largest hospital for the chronically ill in New England, entered into an affiliation with the New England College of Optometry for a program of patient care and clinical education, which began on June 9, 1977. To improve and supplement nursing care, the hospital organized a group of Senior Companions. These volunteers have become an active component of the nursing team by providing such services as visiting patients, writing their letters, escorting patients to recreational areas or on walks on the hospital grounds, and, most importantly, acting as liaison between the hospital and community.

Family Health Services

In the Spring of 1977, the Commissioner of Public Health convened a blue ribbon advisory group of pediatricians and other professionals concerned with the care of children. The advisory group to the Commissioner met to discuss where perceived gaps in children's health services existed, to consider measures to avoid duplication of services, and to define priorities for new programs for prevention.

As part of its continuing efforts on behalf of the handicapped child, the Division of Family Health Services organized a Cardiac Program Advisory Committee, composed of representatives from various medical and public health fields, to evaluate the Division's cardiac programs and to make recommendations for the improvement of the regional distribution of services. Recommendations led to the development of the cardiac program at Lakeville Hospital.

Additional new clinics opened in the central and western parts of the state: a neurology clinic at the University of Massachusetts Medical School, neurology and orthopedic clinics for children at the Northampton Nursing Home, and an orthopedic clinic at the Holyoke Hospital.

To guarantee more efficient functioning of the expanding Women, Infants and Children's Program (WIC), the Division instituted a new WIC centralized voucher production and management system. Nutrition assessment protocols that clarify and standardize certification criteria are now being used by all local programs. Administrators of the state WIC Program are now designing a system to collect data on the health and nutrition of WIC recipients and to put the information into a computer.

The Division initiated the development of a Management Information System that included a Client Subsystem with Functional Systems and a common Client Intake Form. With the completion of the functional specification phase, the computer software will be put together and the Division will be ready to build its client master file.

The Division also contracted with the Center for Educational Resource and Development of the Worcester Polytechnic Institute to develop criteria and methods to monitor and evaluate programs. These will permit easy reference to all patient files and facilitate evaluation of individual programs.



Alcoholism Program

Massachusetts General Laws, Chapter 122I, Acts of 1973, required the inclusion of coverage for inpatient and outpatient alcoholism treatment in all group health insurance policies. Under provisions of the act that became effective on January 1, 1976, the minimum benefit package includes coverage up to \$500 per year. The Department's Division of Alcoholism worked with alcoholism treatment providers and Blue Cross to establish eligibility of these providers to receive reimbursement for services to patients with private health insurance coverage, and to develop the benefit package. Acting on behalf of the 21 detoxification centers throughout the state, the Division negotiated an agreement with Blue Cross to establish a fee-for-service rate for inpatient alcohol detoxification.

A major accomplishment of the Division during the fiscal year was the establishment of 12 regional film and literature centers throughout the state. These regional lending resources made material easily accessible to both alcoholism—service vendors and to the public. The Division developed lists of films and pamphlets with recommendations for different target groups.

To strengthen its community education program, the Division carried out training for its health education staff and added two coordinators of health education to the staff. Members of the staff conducted about 20 basic alcohol education programs and provided technical assistance to 50 community groups.

Consolidation of the Research Unit was instrumental in moving the Division closer to completion of its Management Information System. Under a grant from the Council of State and Territorial Alcoholism Authorities, special staff worked in close cooperation with both the Data Processing Unit of the Department and the Division's Research Unit to facilitate programming and systems development.

HEALTH PROTECTION

Tuberculosis Control Program

In the 12-year period from 1965 to 1977, the Tuberculosis Control Program worked on developing some of the most modern care and treatment facilities and services for tuberculosis in the nation through the use of selected general hospitals for ambulatory and short-term inpatient care, and the development of a network of outpatient facilities in community general hospitals. In March 1977, the Department's inpatient-care contract with Norfolk County Hospital was terminated. Middlesex County Hospital thus became the last remaining long-term tuberculosis hospital in the state. This was the culmination of a long-range plan for the consolidation of tuberculosis hospitals that had begun in 1961 to replace 18 state, county and municipal hospitals with five regional tuberculosis hospitals. Before the reorganization, the 18 sanatoria provided in excess of one-half million hospital days at a cost of more than \$12 million. Hospital days in fiscal 1977 were down below 20,000, and the Department's patient-care costs, even with escalating hospital rates, were less than \$3 million for the fiscal year.

The Program issued new guidelines for the attendance of patients at tuberculosis clinics under contract to the Department. These guidelines are based on the most recent edition of *Diagnostic Standards and Classification*

of Tuberculosis and Other Mycobacterial Diseases of the American Lung Association, and describe which patients should be examined and treated in tuberculosis clinics, the type of visit, and the frequency or duration of eligibility. The guidelines also delineate the three types of visits that are reimbursable at rates established by the State Rate Setting Commission.

Four of the hospitals providing inpatient care under contract with the Department were audited by teams from the Massachusetts Thoracic Society. Medical audits of clinics were conducted by the Director of the Tuberculosis Control Program. The audits generally confirmed the excellence of tuberculosis care. Minor shortcomings found in a few instances were under review and recommended changes were being made.

For the first time, the Tuberculosis Control Program published and distributed a directory of hospitals and clinics for the treatment of tuberculosis, with a data manual of new cases, hospital admissions and clinic visits by Health Service Area. Another "first" of the Program, a meeting of all tuberculosis physicians who work in the statewide network of clinics and hospitals with Department staff, resulted in improved communication between the two groups, and in important program recommendations.



Communicable and Venereal Disease Control

The swine flu episode was undoubtedly the public health issue that created the greatest public concern and set in motion the most extensive vaccination and prospective systematic surveillance program for this disease in the history of public health, both in Massachusetts and in the nation. The Division of Communicable and Venereal Diseases, in conjunction with the Virus Laboratory of the State Laboratory Institute, developed and carried out an intensive search for influenza from September 1976 through April 1977. No cases of swine flu appeared in the state.

Because of the difficulties with the federal program, the mass Influenza Immunization Program did not begin until October 1, 1976. In less than ten weeks, state and local public health workers administered 719,205 doses of flu vaccine — 185,291 doses of the monovalent (swine flu only) and 533,914 doses of the bivalent (swine flu and A-Victoria) vaccine. Of the high risk category, as defined by the Center for Disease Control, 25.1 percent were immunized. The highest response in the bivalent category came from individuals over 65 years of age, of whom 39.5 percent were immunized. Approximately 70 percent of all nursing home residents were immunized. Of the low risk groups in the general population, only 5.6 were immunized.

Because of the increased number of penicillin-resistant strains of *Neisseria gonorrhoeae* being reported in the United States, the Division implemented a statewide surveillance system for the detection, reporting and follow-up of all suspected cases. All positive post-treatment cultures were forwarded to the State Laboratory Institute for penicillinase testing. The few individuals with positive post-treatment cultures were immediately treated with spectinomycin pending confirmatory tests by the Center for Disease Control. None, however, proved to be positive.

Because the majority of women with gonococcal pelvic inflammatory disease (P.I.D.) use hospital emergency rooms, the Division carried out a survey of 50 selected hospital emergency rooms to determine the extent of the problem. As a result of the survey, the Division provided each hospital with a protocol for proper diagnosis, treatment and rapid follow-up of contacts, many of whom were asymptomatic males. The program aimed at reducing the number of cases of P.I.D. in the Commonwealth.



HEALTH WARNING

Certain fish in this area have been found to contain high levels of PCB (toxic chemical) which can cause serious illness if eaten. Do not eat any scup, flounder, tautog, rock bass, lobster, shellfish or eels caught in AREA I or any scup, flounder, tautog or rock bass caught in AREA II as indicated on the map below. Fish purchased from commercial fishermen do not come from this area and are safe to eat. If you have any questions please call your Board of Health.

Food And Drugs

The presence of new environmental contaminants, especially of polychlorinated biphenyls (PCBs), required the coordinated activity of several state agencies. At one time, PCBs were widely used in the manufacture of electrical equipment (four plants in Massachusetts). Once thought to be completely inert, these substances are carcinogenic and toxic when ingested in high doses. The discovery of PCB in a major Massachusetts harbor and river led to a cooperative sampling program by the Division of Marine Fisheries, the Department of Environmental Quality Engineering and the Department's Division of Food and Drugs. The sampling showed levels of PCB higher than five parts per million in lobsters and certain fin fish in one harbor. At the request of the Department, fishermen voluntarily discontinued their fishing until subsequent market samples showed that levels of PCB were well within the safety limits set by the Federal Food and Drug Administration. The Division of Food and Drugs continued monitoring to ensure that no contaminated products entered the commercial market.

State Laboratory Institute

The Biologic Laboratories developed a new method for identifying and extracting special antibodies from outdated blood plasma. The Laboratories also processed antibody against varicella-zoster infections into an immune globulin capable of meeting critical national shortages for use in children with cancer and in patients receiving organ transplants.

By aggressively seeking federal funds, the State Laboratory Institute was able to introduce new, or to expand existing, programs, such as, special immunizing biologicals, follow-up of newborn abnormal thyroid screening tests, and updating of clinical laboratory proficiency standards. Research grants allowed the Institute to put into use its electron microscope, a high resolution instrument capable of analysing the viruses of hepatitis and other diseases.

Through cost-sharing with educational institutes and other units within the Department of Public Health, the State Laboratory Institute made more efficient use of its modern, highly specialized building.

Preventive Medicine

Through its Division of Preventive Medicine, the Department made a strong commitment to the development of programs of health promotion and disease prevention. The position paper, "A Program for Prevention in Massachusetts," stressed that, despite the huge dollar investment in medical care — 8.6 percent of the Gross National Product in 1976 and over 10 percent of the Gross State Product in Massachusetts — the health status of the population has been jeopardized by what has been termed "personal lifestyle." Placing emphasis on the need to prevent disease from occurring in the first place, the Department selected several target areas on which to concentrate its efforts: nutrition and diet; physical inactivity; substance abuse, including alcohol, tobacco and drugs; accidents with special attention to automobile accidents involving infants and children; environmental health; communicable and venereal diseases; genetic disorders; and the use of firearms.

In selecting priorities for program development, the Department selected programs that fall into two categories: 1) those requiring individual involvement and 2) those calling for governmental action. The Department also pinpointed concrete proposals for carrying out its goals: 1) the compilation and dissemination of information demonstrating the favorable ratio of benefits to costs for such health promotion programs as those listed above; 2) coordination with the private sector — to work with hospitals, medical professionals, and private health agencies to develop new programs in prevention; and to encourage the insurance industry to develop financial incentives for healthful behavior patterns; 3) coordination with the public sector — to work with cities, towns and local boards of health to develop programs that reflect the resources and needs of local communities; 4) planning — to encourage the incorporation of prevention as a major element in state and regional health plans being developed by Regional Health Systems Agencies under P.L. 93-641; 5) work in cooperation with the mass media in the promotion of healthful activities.

Cognizant of the lack of resources required to embark upon an all-embracing program of prevention, the Department carried out extensive planning to single out a limited number of projects that could be successfully undertaken and evaluated. Such an approach has the potential to yield important returns for the health of the people.

In its first year of existence, the Division of Preventive Medicine made substantial organizational and programmatic progress. An important achievement was the review and writing of new regulations for Article II of the Sanitary Code, which remains the responsibility of the Department of Public Health. Article II, the housing sanitation code, sets minimum standards of fitness for human habitation. The Division also began rewriting the Public Health Regulations for Correctional Facilities, which establish the environmental housing conditions for all correctional facilities in the Commonwealth. Both sets of regulations will be presented for approval to the Public Health Council early in the next fiscal year.

To reassert the role of the Regional Health Offices as the focus of public health activities in the regions, the Division appointed three new Regional Health Officers. Only the Central Regional Office remained without an acting health officer.

Preliminary activities of the Division began in a few selected areas: the child restraint program expanded to include three additional hospitals, and printed its educational material for parents in Spanish; the nutrition component of the Division worked with the Nutrition Board to develop a statewide nutrition policy plan that aims to improve the nutritional status of all the citizens of the Commonwealth, regardless of social and economic factors; working in conjunction with the Governor's Committee on Physical Fitness, the Division initiated the preparation of materials on cardiovascular fitness directed to physical education and health department personnel.

HEALTH PLANNING

The integration of the Office of Comprehensive Health Planning and the Office of Health Statistics into one Office of State Health Planning was completed in fiscal year 1977. In developing a statewide health policy and a State Health Plan, the Office of State Health Planning worked in cooperation and consultation with other health-related state agencies, the Health Systems Agencies (HSAs) and private health-care agencies. The same approach was used in developing Standards and Criteria for Acute Care, Long-Term Care, Neonatal Care and Psychiatric Inpatient Units.

On November 26, 1976, the Public Health Council adopted a uniform set of Acute Care Standards and Criteria to be consistently applied by the Department and the Health Systems Agencies in carrying out the provisions of the Determination of Need program and of P.L. 93-641, the National Health Planning and Resources Development Act of 1974. By the end of the fiscal year, a draft of Long-Term Care Standards and Criteria had been completed, as well as a draft of Standards and Criteria for Neonatal Care.

The final report of the Health Manpower Linkage Project, which had been completed during the year, included detailed analysis of all available health manpower data and information related to accreditation of health manpower education programs, licensure and

certification of health professionals, and to utilization of health professionals in Massachusetts. The report also listed major recommendations for the development of health manpower and the allocation of educational resources in the Commonwealth.

HEALTH STATISTICS

During the year, the Registrar of Vital Records was transferred from the Secretary of State's Office to the Department's Vital Statistics component of the Office of Health Statistics. The change improved the availability and accuracy of all birth, death, marriage and divorce records.

A major concern of the Department has been the lack of coordination in the collection and analysis of health data. Under a contract from the National Center for Health Statistics, the Department worked with other public and private health agencies to explore the feasibility of establishing a data consortium. The study indicated that the primary job of such a consortium would be to provide a practical, cost-effective mechanism for the collection, analysis and dissemination of data from multiple sources. The first phase of the study concentrated on a consortium to develop a statewide hospital discharge data base, using the Uniform Hospital Discharge Data, plus the nature of admission and service utilization.

HEALTH REGULATION

Long-Term Care

In the second half of the fiscal year, the Division of Long-Term Care was reorganized as a result of the merger of the Periodic Medical Review staff (responsible for patient care inspections) and the survey certification field staff (responsible for monitoring long-term care facilities for compliance with state licensure and federal certification standards for participation in the Medicaid and Medicare programs). The newly reorganized Division has been reevaluating its regulatory methods, putting more emphasis on the quality of services to patients.

A computerized survey inspection system was implemented throughout the Commonwealth in December 1976. Assessment teams were collecting baseline data. In addition to providing information for analyses of compliance in Long-Term Care facilities, the new inspection system has been used to identify areas in the regulatory process where improvements can be made. It has also helped to focus staff effort on those facilities with the greatest problems.

Emergency Medical Services

The Office of Emergency Medical Services (OEMS), which has operated within the Department of Public Health since 1973, introduced several new programs to broaden and improve emergency medical care in the Commonwealth. The development of standards and criteria for pre-hospital Advanced Life Support Systems staffed by paramedics will benefit the critically injured or ill person. In cooperation with the American Heart Association and the American Red Cross, OEMS initiated a statewide Heart Saver Program, with the goal of training 20 percent of the state's population in cardiopulmonary resuscitation (first aid for heart attack victims) by 1982.

Responding to the mandate of Chapter 752, Massachusetts General Laws, which calls for a statewide coordination of poison information and control services, the Department established a statewide poison committee, composed of representatives from the six existing poison control centers in the state, emergency department physicians and nurses, pediatricians and pharmacists. After a year of meetings, research and analysis, the committee developed a structure for a comprehensive statewide poison system. The Massachusetts Poison System, supported by public and private resources, will become operational January 1, 1978.



MANAGEMENT SERVICES

Personnel

The Personnel Office selected an Affirmative Action Officer, whose initial charge was the development of an Affirmative Action Plan to ensure equal opportunity for all persons in employment and personnel practices. Work on the plan has resulted in standardized policies for new hirings, promotions and transfers. To facilitate its activities, the Personnel Office began exploring alternative methods of data reporting and retrieval at the same time as it aimed to decentralize some of the processing functions.

Through its training section, the Personnel Office prepared a *Handbook for Managers and Confidential Employees* to acquaint them with some of the basic policies and procedures concerning employment in the service of the Commonwealth. An *Employee Handbook* was being planned for future production. The Personnel Office was actively engaged in the statewide review classification for all management positions in the state, and has begun a departmental Staff Development Plan and Employee Performance Appraisal System to serve the needs of Department managers and employees.

1976-1977

Continuing Programs

HEALTH SERVICES

One of the major functions of the Department of Public Health is the provision of direct health services that are not generally provided by the private sector. Primary services include: hospital care through seven departmental hospitals, detoxification and rehabilitation through the Department's community-based alcoholism program, and services to mothers and children through Family Health Services.

Alcoholism Program

The Division of Alcoholism continued to support a statewide system of 21 alcoholism intervention centers with 480 beds. During fiscal year 1977, these detoxification facilities admitted 44,974 individuals, an overall utilization rate of 96 percent.

Several programs, which are funded through contracts with the Division, through state funds, federal formula and federal bonus grants, and special project grants, continued to operate and grow. The Division supported 36 halfway house programs (784 beds) through a fee-for-service contract with each program, and continued to develop and expand training programs for personnel of detoxification centers by contract to the Massachusetts Association of Detoxification Directors. Two halfway houses, formerly supported by federal formula grants, were transferred to state funds during the first half of fiscal year 1977.

The Driver Alcohol Education Program operated through 27 vendors, under contract with the Division of Alcoholism, that serve the 73 district and municipal courts in the Commonwealth. The statewide system was supported entirely by court-mandated fees of up to \$200 per client. During the fiscal year, the 27 programs served 14,869 clients and produced \$1.8 million in fees to support the program.

The number of clients seen in the 28 state-supported outpatient clinics increased to 14,802 clients. The increased caseload stemmed from the success of the Driver Alcohol Education Program, from community education programs, plus a greater awareness of alcohol-related problems on the part of the general public and referring agencies.

The Division of Alcoholism continued the funding of 10 special projects designed to meet the treatment and intervention needs of minorities and young persons. Special projects included a street worker's effort to enhance the youth treatment network within a suburban community, and a 24-hour hotline serving the needs of the Black and Hispanic communities of Worcester.

Four halfway house programs established exclusively for women continued to receive funding from the Division. How to provide supportive day care services for the children of women in treatment was under investigation by agency staff.

To strengthen its employee alcoholism programs, the Division hired one alcoholism coordinator to specialize in occupational programming, continued the funding of three special alcoholism intervention projects designed to encourage implementation of occupational programs, and began funding a fourth project. The projects were geared to the industrial communities of central and western Massachusetts.

Hospitals

The Department's seven hospitals continued to provide a broad range of clinical services to meet the needs of patients with long-term but remediable disabilities. Working more closely with other agencies within the Executive Office of Human Services, especially the Departments of Correction and Public Welfare, the Department extended its basic preventive and protective services to segments of society that do not usually receive help from private medical resources. The hospitals' services and programs are briefly summarized:

HOSPITAL	SERVICES
Lakeville	Comprehensive rehabilitation and education for handicapped children, rehabilitation for physically handicapped adults, chronic renal dialysis.
Lemuel Shattuck	Medical and surgical care of chronic illness, emphasizing pulmonary disease care, renal dialysis, chronic alcoholism and vascular programs.
Massachusetts Hospital School	Education and vocational training in conjunction with medical and surgical care of physically handicapped but intellectually able children.
Pondville	Multimodality treatment of cancer in adults and children.
Rutland Heights	Long-term hospitalization and rehabilitation of adults with chronic diseases and alcoholism.
Tewksbury	Medical and surgical care of chronically ill and severely handicapped adults, alcoholism program.
Western Massachusetts	Long-term care of chronic illnesses in adults, rehabilitation and alcoholism programs. Medical and surgical care of multiply handicapped children.

- Lakeville Hospital continued to care for some chronic patients. In the past year, however, major efforts were directed toward expanding its program of comprehensive rehabilitation services to the physically handicapped of all ages. The hospital initiated a Foster Grandparents' program for children who do not have family present or able to visit regularly, and began construction of a Sheltered Workshop.
- Lemuel Shattuck began planning with the Department of Correction for the development of an integrated primary-care delivery system. This would include using the Shattuck-Tufts-New England Medical Center complex for rotation of primary care residents through Department of Correction facilities, and increased use of nurse clinicians and physician assistants trained and supported by physicians at the Shattuck and the New England Medical Center.
- The Massachusetts Hospital School, in cooperation with the Department's Division of Family Health Services, sponsored a four-week camp program on the school campus for physically handicapped children. The camp was in session for two 2-week sessions and served a total of 37 children. The program sought to provide an opportunity for social development and recreational experience for physically handicapped children. Interdisciplinary consultation involving the school, nursing, social service, physical therapy and occupational therapy led to more flexibility in discussing the problems of functioning outside the school when children are eventually discharged from the Hospital School.
- Pondville Hospital continued its basic research in the causes and prevention of cancer, and in the role played by immunological factors in the development and treatment of cancer. Work also continued in the development of tests for the earlier detection and more accurate follow-up of patients with cancer.

Table 1

PUBLIC HEALTH HOSPITALS
YEARLY CENSUS SUMMARY - JULY 1, 1976 - JUNE 30, 1977

HOSPITAL	Operating Capacity	Admissions	Discharges	Average Daily Census	Percent of Occupancy	Average Length Of Stay	Outpatient Visits	Total Patient Days
Lakeville	130	316	279	107	83	87	4,582	39,350
Lemuel Shattuck Mass. Hospital School	250	1,795	1,648	1,749	84	29	8,098	54,321
	135	183	180	104	69*	121	1,676	38,152
Pondville	80	1,261	1,119	59	79	17	14,257	23,427
Rutland Heights	285	469	463	186	88	112	2,347	67,263
Tewksbury Main Building	755	457	269	690	92	77	251,540
Western Mass.	100	675	645	72	72	35	7,326	26,385
TOTALS	1,735	5,156	4,603	38,286	500,438

* Low percentage reflects policy of Hospital School to allow patients to go home for holidays or vacations.

- Rutland Heights Hospital improved its laboratory services through the acquisition of needed equipment, the revamping of operational methods and the increased training of personnel. As a result, the hospital was able to increase the number of clients seen in its comprehensive multiphasic screening program. The hospital has begun discussion on introducing a comprehensive program for the elderly, as well as a physical fitness program for the hospital staff.
- Tewksbury Hospital awarded certificates in Clinical Pastoral Education to approximately 40 clergymen and nuns. The course on how to administer to the sick and dying has been in operation at the hospital for 16 years. Maintaining close ties with the community, the hospital cooperated with the Neighborhood Youth Corps in their program for the employment of underprivileged children; permitted encampment of the Greater Lowell Council, Boy Scouts of America, on the hospital grounds for several weekends during the summer; made quarters available for the Head Start Program and for the Day Care Center for children of working mothers from low-income families.
- Western Massachusetts Hospital expanded its Respite Care Program for multiply handicapped children. The program gives parents of these children an opportunity to bring them to the hospital for evaluation and treatment. Many of the children stay in the hospital as inpatients.

The hospital expanded its educational programs by establishing a community medical clerkship with the University of Massachusetts Medical School, and by developing several affiliations: nursing with the University of Massachusetts School of Nursing, medical assistants program with Springfield Technical Community College, nurses aide program with Westfield Vocational School, and psychology with Westfield State College.

The seven hospitals, with an actual operating capacity of 1,735 beds, admitted 5,156 patients during fiscal year 1977, a decrease of 400 from 1976. Improved administrative and staffing patterns, and new programs were expected to increase the total hospital census in the coming year. The average length of stay varied from 17 days at Pondville to 121 days at the Massachusetts Hospital School. The number of outpatient visits, although still high — 38,286 — represented a drop of 3,279 from 1976 (Table 1).

The Department's hospitals, as part of the total public health effort, continued to expand programs for the training of physicians and paramedical personnel. Lemuel Shattuck, Pondville, Tewksbury and Western Massachusetts Hospitals, through their accredited schools of practical nursing, graduated about 150 licensed practical nurses, many of whom continue to work at the hospitals.

The hospitals also provided inservice training, conducted seminars, participated in broadly sponsored programs and engaged in research.

Family Health Services

Improved health services to mothers and children in the Commonwealth remained an important part of the Department's total effort to upgrade community health. Through the two components of the Division of Family Health Services — Maternal and Child Health, and Services for Handicapped Children — the Department carried out programs aimed to reduce infant and maternal morbidity and mortality, to promote maternal and child health, and to evaluate and treat handicapped children.

Maternal and Child Health

The grantee of funds under the Maternal and Infant Care Projects and of the Children and Youth Projects, the Department was able to fund a program in Springfield operated by the Wesson Women's Unit of the Baystate Medical Center. This brought to 12 the number of MIC projects in the Commonwealth, eight of which are in Boston. The 11 C&Y projects in the state, eight of which are in Boston, continued to receive support. Approximately 40,000 children were seen in these programs.

Closely related to the MIC and C&Y projects, the Women, Infants and Children's Program (WIC) continued to expand. Massachusetts had an annual WIC budget of \$5.75 million, with an authorized caseload of 19,000. The number of local programs grew from eight in August 1976 to 21 by June 30, 1977.

The School Health Unit worked as consultants with school administrators, local boards of health, school

nurses and physicians, and health educators to strengthen school health programs in the community. The Unit completely revised and updated the School Administrator's Guide to School Health for statewide distribution.

The Screening Program for Infant Hearing Impairment was implemented statewide through the regional health offices. Procedure manuals and brochures were revised and distributed to all hospitals, health centers and clinics. The Vision and Hearing Program trained 892 local school personnel in vision and hearing screening.

Other Family Health Services projects that continued during the year included rheumatic fever prevention, epilepsy control, aid to children with cystic fibrosis or hemophilia, premature birth programs for wed and unwed mothers, and family planning.

Services to Handicapped Children

The Services to Children with Multiple Handicaps broadened its services to meet the individual needs of each child. For the first time, pediatric nursing home beds were fully utilized. In fiscal year 1977, 256 multiply handicapped children were placed in residential care; 150 were in day care programs. In addition, families received assistance through homemaker care (91), respite residential care (10), and evaluation and planning for special needs.

Social Service

Sixty-three social workers, based in the Divisions of Family Health Services, Patient Care (hospitals), and Long-Term Care, seek to help individuals and families to function at their optimum level, both socially and emotionally. Social work methods used to achieve this goal include: case work, provision of tangible services, patient advocacy, consultation and community organization.

During fiscal 1977, social workers from the Department of Public Health collaborated with their colleagues in the Department of Mental Health in formulating and carrying out preventive social work with Mental Health patients who had been admitted to the Lemuel Shattuck, Rutland Heights, and Tewksbury Hospitals.

Community outreach programs had the benefit of greater social work participation:

- Establishment of an educational counseling group for parents of children with cleft lip and palate through the Western Regional Health Office.
- Interagency Planning Group in Region II, responsible for the design and development of a model system of early identification, screening and assessment of all children with special needs from 0—3 years of age.
- Increased involvement as members of the Office for Children Interdepartmental Team, of the Massachusetts Department of Education Regional Advisory Council, and of the Southeastern Massachusetts Health Planning and Development Agency.



HEALTH PROTECTION

HEALTH SURVEILLANCE AND DISEASE CONTROL

Health surveillance and disease control encompass the classic core activities that are and must remain the direct responsibility of the state. These activities are carried out primarily in three related sections of the Department: Communicable and Venereal Diseases, Tuberculosis Control and the State Laboratory Institute.

Communicable Disease Control

The impressive progress recorded through the statewide immunization program continued through calendar year 1976. Measles were down from 19,512 cases in 1965 to 39 cases in 1976. Mumps were down from 9,024 cases in 1968 to 157 cases in 1976. Rubella was down from 1,737 cases reported in 1969 to 196 cases in 1976. The statewide immunization programs not only prevented illness and death, but also saved the Commonwealth approximately \$9,897,200 in actual costs for medical care and institutionalization of patients (Tables 2,3,4).

Massachusetts has been on a maintenance immunization program against polio since polio vaccine became available. As a result of the statewide programs, not a single case of polio has been reported in the Commonwealth since 1968. An immunization survey of children entering kindergarten or grade one in 1976 showed that 95.84 percent had already received polio vaccine as compared to 94.1 percent in 1975.

Table 2

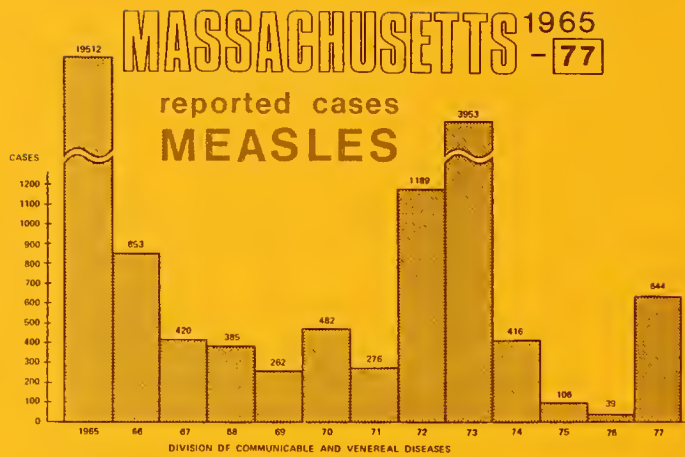


Table 3

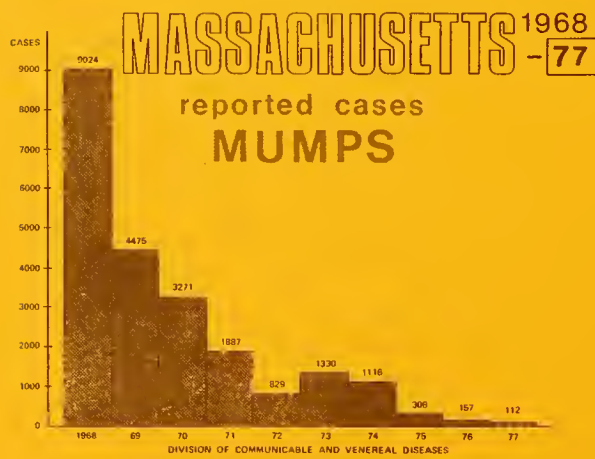
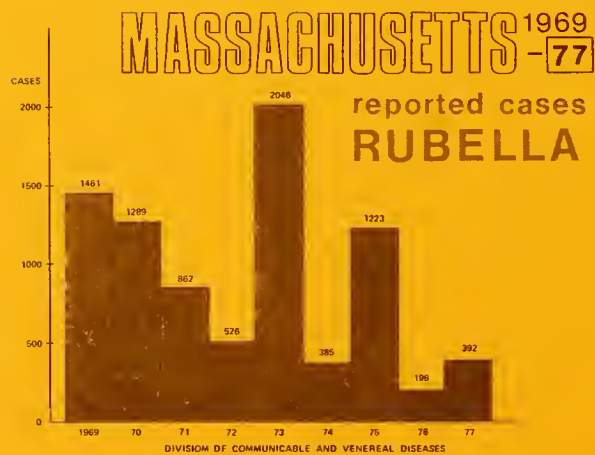


Table 4



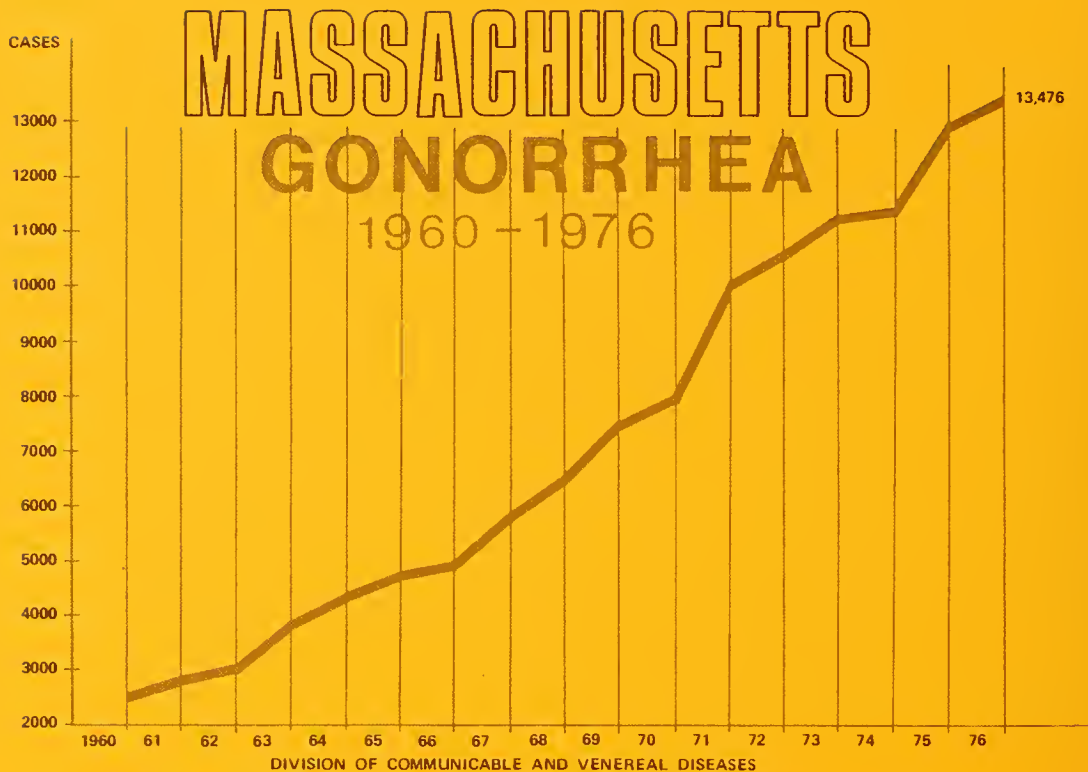
The percentages of these children immunized against the other six immunizable diseases all showed increases over 1975:

	<u>1975</u>	<u>1976</u>
Diphtheria	DTP 95.04	96.21
Tetanus		
Whooping Cough		
Measles	94.60	96.21
Mumps	78.00	84.56
Rubella	78.51	84.55

The prevalence of other preventable infectious diseases in the state remained low. Only six cases of whooping cough and one of tetanus were reported. There were no reported cases of diphtheria or smallpox. During the calendar year 1976, the Division investigated 17 food and waterborne outbreaks.

Rabies has been on the increase in Massachusetts since 1961, when a rabid bat was detected. Stringent federal and state regulations for the use of DDT to control bats living in dwellings with human beings have intensified the problem of control. Although the incidence of rabies in the state (all in bats) remained low, the number of rabid bats increased from 21 in fiscal year 1976 to 23 in fiscal year 1977. There have been no reported cases of rabies in ground animals since 1974, when one rabid skunk was found in Fort Devens. The low incidence of rabies in the state is attributed to the program of pre-exposure immunization of highly susceptible groups, inauguration of dog immunization clinics conducted annually by local boards of health, and educational programs for school-age children.

Table 5



Venereal Disease Program

Of the 14 sexually transmissible diseases, seven — gonorrhea, trichomonas vaginitis, monilial vaginitis, genital herpes, genital warts, non-gonococcal urethritis and scabies — are now epidemic in Massachusetts and in the nation. Pediculosis was also on the upward curve of the epidemic cycle. Because of the increase in the cases of genital herpes (also important for its oncogenic potential) and non-gonococcal urethritis, the Division proposed the inclusion of these two diseases in the list of reportable diseases in the state.

The 13,476 cases of gonorrhea reported in the calendar year 1976 in the Commonwealth represented an increase of 3.9 percent but constituted almost a threefold increase over the 4,928 reported cases in 1966 over 1975 (Table 5). The estimated number of gonorrheal infections, however, was 53,904. This figure was based on a Center for Disease Control survey that indicated that only 25 percent of treated cases of gonorrhea are reported.

For the calendar year 1976, primary and secondary syphilis showed an increase of 9.5 percent over 1975: 546 cases in 1975 up to 598 in 1976. Early latent syphilis declined by 4.7 percent.

The Department's program for the screening of asymptomatic females continued with the renewal of a federal grant for \$265,000. Approximately 100 facilities or individuals — neighborhood health centers, family planning clinics, student health services, other community-based clinics and private physicians — participated in the program. During fiscal year 1977, the program examined 160,708 women by culture, of whom 5,152 were found positive, a rate positive of 3.2 percent.

In its continuing attack upon venereal diseases, the Department broadened its program of education, treatment and control. The 20 state-supported venereal disease clinics in the outpatient departments of general hospitals examined over 23,000 patients, who made a total of 56,507 visits. The Division gave training in venereal disease control to 320 individuals, distributed over 124,000 pieces of literature, and gave a week's training to an English physician who had been sent by the World Health Organization.

Tuberculosis Control Program

Despite the dramatic reduction in the number of hospital days for the treatment of tuberculosis in Massachusetts, tuberculosis remained a significant health problem and a source of crippling disease. In the calendar year 1976, the number of newly diagnosed cases reported was 676, a decline of 5.9 percent from the cases reported in 1975.

The failure of the new tuberculosis case rate to decline as rapidly as had been expected was attributable to an influx of high-risk population into the state, to high unemployment rates, and to continuing decline in the standards of inner-city housing. Under mandate of federal law, the Commonwealth admitted 310 aliens with diagnosed or suspected tuberculosis. Of this number, 26 had a diagnosis of tuberculosis, and the balance had abnormal chest films indicating old tuberculosis or other pulmonary fibrosis. Boston, Fall River and New Bedford continued to receive the greatest number of these aliens.

The Tuberculosis Control Program continued to provide short-term hospitalization by contract in seven general hospitals, and surgical services in two others. There were 364 hospital admissions during the year. Outpatient facilities in contract clinics had 47,000 patient visits for treatment.

Program personnel worked closely with local boards of health and other agencies to provide education and training. Nurses in the Program conducted a series of seminars and tuberculin-testing demonstrations for local boards of health and for hospital nurses. The employment of a French-speaking worker for a high-risk area of Boston strengthened the Tuberculosis Control Program's ability to work with people in their communities and to provide an integrated health protection system.

STATE LABORATORY INSTITUTE

The State Laboratory Institute, through its two sections, the Division of Biologic Laboratories and the Division of Diagnostic Laboratories, carried out its multiple functions:

- Research and development of new technology
- Production of serums and vaccines for use throughout the state
- Diagnosis of rare or exotic disease
- Establishment of new diagnostic tests.

BIOLOGIC LABORATORIES

The Division of Biologic Laboratories maintained its production and distribution of vaccines, toxoids and human plasma at approximately the same volume as in the previous year. Immune globulin, tetanus immune globulin and Rh immune globulin showed modest increases. Distribution of tetanus and diphtheria toxoids (Adult) increased as the use of diphtheria and tetanus toxoids (Pediatric) declined. The demand for hepatitis immune globulin continued to increase.

The Division continued its modernization and upgrading of processes and equipment. It was able to eliminate fiber-releasing filters from processes for the production of bacterial antigens, and achieved considerable progress in the case of plasma products. Other important developments during the year included:

- Tetanus toxoid — A highly purified form of tetanus toxoid was found to give a satisfactory immune response and a reduced incidence of reactions as compared to the conventional product. Further trials in a small group of human volunteers were being planned.
- Immune Globulin — A program of screening of incoming human plasma for production of immune globulins for prevention or therapy of human diseases was initiated. The program resulted in improved tetanus immune globulin and varicella-zoster immune globulin.

Table 6

Diagnostic Laboratories
Metabolic Disorders
Laboratory

July 1976 — June 1977

A. Routine Specimens	Number	Percent of Live Births*
Umbilical Cord Blood	65,211	96.5
Newborn Blood	66,921	99.0
Newborn Urine	55,980	82.8
	<hr/> 188,112	
B. Other Specimens**	4,990	
Total Number of Specimens	193,102	
Total Number of Tests Performed	<hr/> 731,854	

* Based on an estimated 67,578 live births in Massachusetts.

** Include "special" blood, repeat newborn urines, repeat newborn bloods, and prenatal sera.

Table 7

NEW ENGLAND REGIONAL
HYPOTHYROIDISM SCREENING PROGRAM
JULY 1976 — JUNE 1977

STATE	No. Screened	Low or Borderline T4	Confirmed Hypothyroid
Connecticut	35,826	293	7
Maine	15,961	140	2
Massachusetts	67,667	415	19
New Hampshire	8,698	42	2
Rhode Island	11,339	95	0
Total	139,491	985	30

DIAGNOSTIC LABORATORIES

Through its Laboratory Improvement Program, the Division of Diagnostic Laboratories assisted local laboratories throughout the state to achieve a high degree of excellence in the performance of clinical laboratory tests. During 1976-1977, the proficiency testing program was maintained at approximately the same level as in the previous year. In calendar year 1976, the Program awarded certificates of approval to 301 laboratories (10 more than in the previous year) for the performance of one or more diagnostic specialties.

The Program remained responsible for proficiency testing of hospital blood banks, of laboratories performing maternal and prenatal blood tests for syphilis, and of laboratories in the Medicare program. Approximately 100 laboratories were enrolled in a voluntary program of training in clinical chemistry conducted by the Laboratory Improvement Program.

Metabolic Disorders Laboratory

The Metabolic Disorders Laboratory continued to test newborns in the state for over 30 inborn errors of metabolism. The total number of tests performed on 193,102 specimens was 731,854 (Table 6).

During the year, three infants with phenylketonuria (PKU) were identified and placed on the appropriate diet. In addition, babies with other metabolic disorders, such as, galactosemia, maple sugar urine disease, cystinuria and Hartnup disease, were discovered and placed on the appropriate diets.

Hypothyroidism Screening Laboratory

The Hypothyroidism Screening Laboratory, which began operations in January 1976, screened 139,419 newborn blood specimens for congenital hypothyroidism (cretinism) during fiscal year 1977. Of these specimens, 67,667 came from Massachusetts, and 71,824 from four other New England States — Connecticut, Maine, New Hampshire and Rhode Island (Table 7). Thyroid hormone levels of 985 of the infants screened were below the lower limit of normal. Additional testing indicated that 955 of the 985 had low values associated with causes other than typical congenital hypothyroidism. Two of the 30 infants died of unrelated illness. The remaining 28 were placed on thyroid hormone replacement with gratifying results.

Parasitology Laboratory

The Parasitology Laboratory provided serologic services for the detection of toxoplasmosis, a parasitic infection capable of causing significant diseases, particularly in the newborn. The demand for toxoplasma testing steadily increased, from 574 specimens in 1972 to 1,800 in 1977, an increase of 17.6 percent over 1976. The laboratory continued to test for other parasitic diseases and to provide telephone consultation to physicians, veterinarians, laboratories, local health departments and health facilities on the diagnosis, control and treatment of various zoonotic and parasitic diseases.

Virology Laboratory

The Virology Laboratory provided consultation and the specialized type of laboratory services that are unavailable elsewhere in the Commonwealth. The Laboratory's network of blood specimen collections for atypical infections and its ability to rule out other causes led to the identification of four cases of Legionnaire's Disease in Massachusetts residents who had not travelled to Philadelphia. The Center for Disease Control confirmed antibody response to the disease. These cases helped to prove that the disease is not necessarily new and that sporadic cases occur even though person-to-person transmission is rare. Although cases of Legionnaire's Disease appeared to be infrequent and in widely scattered areas in the state, the Department continued to maintain close study of unusual cases of pneumonia.

Arbovirus surveillance was carried out according to surveillance protocols established in 1974 for mosquitoes and human patients with central nervous system (CNS) infections. Infection rates for both eastern (EEE) and western equine encephalitis (WEE) viruses in mosquitoes declined markedly. The minimum infection rate per 1,000 mosquitoes was the lowest recorded since 1972. No human or equine cases of EEE occurred in 1977. The Department of Public Health and other state agencies responsible for surveillance and control remained alert, however, for the reappearance of mosquito-borne virus as had happened in 1973.

Bacteriology Laboratory

The Throat Culture Program of the Bacteriology Laboratory processed 82,999 specimens from patients 12 years of age and under, a decrease of 7 percent from the previous year. The decline was attributable, in part, to the severe winter weather, which prevented many patients from getting medical attention. The Enteric Disease Program processed 8,615 specimens, an 8 percent reduction from 1976, since the state had experienced no moderate or large enteric food outbreaks during the year. The Gonorrhea Control Program and the Mycology Program reported increases in the number of specimens processed, 6 percent and 4 percent respectively.

Serology Laboratory

Although 766 suspicious animals (an increase of 166 over 1976) were examined in the Rabies Testing Program, Massachusetts remained free of rabies in ground animals. In fiscal 1977, however, both the number of bats examined and the percentage positive increased — 23 (11.2 percent) of the 269 bats submitted for examination were positive.

Lead Poisoning Prevention

A federal grant of approximately \$500,000 allowed the Childhood Lead Poisoning Prevention Program to increase its de-leading crews. Work of these crews doubled the inspection output and resulted in the de-leading of over 200 dwellings. The laboratory component of the Program continued to test 100,000 children one through five years of age at least once for lead poisoning.

Food and Drugs

The Division of Food and Drugs is charged with the responsibility of protecting the consuming public from the detrimental effects of adulterated foods, chemicals and drugs, unsanitary bedding and upholstery. The Division is also responsible for the licensing of vending machines, cold storage warehouses, upholstered furniture, stuffed toys; the licensing of manufacturers of narcotic drugs and establishments that use animals for experimental purposes. Inspections and laboratory activities of the Division accounted for more than 85 percent of the Division's total program cost.

At the request of the purchasing agent of the Department of Administration and Finance, the Department agreed to assume the personnel and functions of the State Purchasing Laboratory. The move incorporated the laboratory apparatus and personnel of the Purchasing Laboratory within the existing facilities of the Division.

On April 26, 1977, the Public Health Council adopted food labeling regulations prepared by the Division. The regulations established standardized type-size and placement requirements, nutrient labeling for certain categories of foods, and requirements for so-called natural and organic foods.

Preventive Medicine

Seeking to reestablish the regional presence of the Department throughout the state, the Division of Preventive Medicine strengthened the personnel in the four regional health offices. The regional health offices continued to coordinate the Department's general field activities and to act as intermediaries between the central service programs and the local health agencies. To the extent that personnel were available, staff worked to enforce the articles of the Sanitary Code for which the Department is responsible, to carry out prison inspections, and to certify migrant camps.

Only a few activities of each regional office in the past year can be mentioned:

- Central Region — Public Health Nursing Advisors organized supervisory personnel in the Home Health Agencies to develop nursing protocols for major and chronic illnesses. Regional personnel worked to hasten regionalization of nursing services. The four nursing agencies that formerly constituted the Assabet Valley Health Association merged and agreed to retain the original name.
- Northeastern Region — Staff worked with local boards of health to expand services in the communities. They held meetings with nurses from the Chelsea, Revere and Winthrop Boards, as well as with the Visiting Nurse Association, to stimulate cooperative efforts in planning for health promotion programs. Public Health Nursing Advisors represented the Department on Office for Children Interdepartmental Teams in Region III and IV, and on the Department of Education Regional Review Boards.

- Southeastern Region — Staff participated in greater efforts for regionalization and interagency planning. The Regional Office had representation on the task force on health prevention and promotion of the HSA in the region, which began preparation of a five-year plan. Public Health Nursing Advisors helped develop two new Home Care Corporations under the Department of Elder Affairs.
- Western Region — During the summer of 1977, five graduate students from the Division of Public Health, University of Massachusetts, were doing field training in the Regional Office. Guidelines were prepared to define clearly the responsibilities of the students, as well as of the Regional Office staff. In addition, physical therapy and social work students did internship programs during the fall and spring school terms.

Fluoridation Project

The Fluoridation Project continued its program of education throughout the state. It sent copies of the revised *Fluoridation Handbook for Massachusetts Communities* to agencies, student groups, and citizen organizations that had requested it. Pamphlets and other written material also helped spread the message of fluoridation.

In December 1976, the communities of Dedham and Westwood began fluoridating their water supplies, to bring to 57 the number of communities in Massachusetts with fluoridated public water supplies. Twenty-two percent of the state's population was then receiving fluoridated water.

The highlight of the year, however, was the breaking of ground for the facility that will house the equipment necessary to fluoridate the Metropolitan District's water supply. Fluoridation of the MDC's water supply will begin early in 1978, at which time more than half the population of Massachusetts will receive fluoridated water.

HEALTH REGULATION

Through its program of standard setting, inspection, licensure and review, the Department works to ensure the people of Massachusetts safe health care. Under the provisions of the Determination of Need Act, the Department also has responsibility for preventing unnecessary expansion of health care facilities.

HOSPITALS AND AMBULATORY CARE

The Division of Hospitals and Ambulatory Care is responsible for the licensing of all hospitals and clinics in Massachusetts. In addition, the Division, under contract with the federal government, is responsible for the certification of all hospitals, clinics, independent laboratories, portable X-ray units and independent physical therapists for participation in the Medicare and Medicaid programs.

During the past year, the Division surveyed 57 general and chronic disease hospitals and 57 clinics. The Division's licensure activities were closely coordinated with two other state agencies, the Departments of Public Safety and Public Welfare.

Radiation Control Program

Radiological health specialists in the Radiation Control Program carried out surveys of diagnostic and therapeutic X-ray units in hospitals and private offices, and of nuclear departments in hospitals, educational institutions and private offices. In fiscal year 1977, the Program surveyed 1,171 X-ray units in hospitals and physicians' offices, and 1,187 units in dental offices. Program personnel surveyed colored television receivers, microwave ovens, and supermarket laser checkout systems on a request basis.

The Radiation Control Program collected data on the number of diagnostic procedures, such as, radiographic fluoroscopy, CT brain scans, pneumoencephalograms, cerebral angiograms, and radionuclide brain scans. The Program continued to monitor the field of radiation oncology to determine the number of new patients, the total number of treatments given, and the availability of treatment planning. Staff of the Program prepared an updated version of the status of CT scanning in the Commonwealth and in the nation for use by the Determination of Need Program.



HEALTH FACILITIES DEVELOPMENT

DENTAL HEALTH

Staff of the Division of Dental Health worked on the administration of Medicaid dental services, and served with staff from the Department of Public Welfare as a professional service review group. The 80,000 claims reviewed during the year represented a 60 percent increase over the previous year. Review of these claims resulted in an average cost reduction of 18 percent to the Commonwealth.

LONG-TERM CARE

The Division of Long-Term Care was responsible for the annual certification of 596 Skilled and Intermediate Care Facilities, eight Department of Mental Health Schools for the mentally retarded, and of 145 home health agencies; for the licensure of 851 nursing and rest homes; and for the annual individual review of 8,000 Level II Medicare patients, 22,000 Level III Medicaid patients, and 1,100 patients in State mental hospitals.

The Division was actively involved in developing innovative projects and in the reevaluation of current programs. An important study reviewed and revised the nursing home care program to utilize nurse practitioners or physician's assistants as an effective substitute for physicians in participating nursing homes in the Boston area.

Under the provisions of the Determination of Need Law (Chapter 776 of the Acts of 1972), the Department of Public Health is responsible for all Determination of Need activities in the state. The purpose of the legislation was to prevent unnecessary building of new, or expansion of, existing health facilities, and to avoid wasteful duplication of services and facilities. The legislation also sought to ensure accessible and quality health care to all persons in the Commonwealth, and to control spiraling health costs.

The Office of Health Facilities and Development reviewed all applications for construction or expansion of a health care facility, or acquisition of equipment, that entail a capital expenditure of \$100,000 or more. The Office also reviewed applications of health facilities that asked for a substantial change in service, or for original licensure. In fiscal 1977, the Public Health Council acted upon 95 applications, of which 79 were approved and 16 denied. An additional 26 applications were withdrawn before Council action. The estimated capital cost savings on hospital, nursing home and clinic facilities came to \$56,091,735.

During the fall of 1976, the Public Health Council made two important amendments to the Determination of Need regulations: 1) For the first time, the regulations included standards and criteria for determining the need for new, or replacement of, acute care beds. 2) All licensed hospitals in the state were required to submit one and five-year plans.



EMERGENCY MEDICAL SERVICES

Ambulance Regulation Program

Fiscal year 1977 marked the end of the three-year phase-in period established by the 1973 State Ambulance Law for the upgrading of emergency medical transportation services. During the year, staff from the Department's Ambulance Regulation Program inspected almost two-thirds of the 450 ambulance services in the state that operate over 1,000 ambulances. Licenses were issued to 65 ambulance services. During the inspection and licensure process, staff provided technical assistance to ambulance service personnel, such as:

- Information about new standards and technology
- Help in assessing and reorganizing current resources
- Pre-acceptance inspection of new ambulance before final purchase by a service.

Office of Emergency Medical Services

The Office of Emergency Medical Services (OEMS) worked with local communities and health care providers to improve the delivery of emergency medical care. Supported by federal Emergency Medical Services grants, OEMS continued its efforts to upgrade resources and to establish local and statewide emergency medical services networks:

- Provided free Emergency Medical Technician (EMT) training to over 1,500 ambulance attendants and others, and gave statewide direction and guidance to other training programs for over 10,000 EMTs in the Commonwealth.
- Provided statewide direction in appropriate first-aid training of First Responders (state and municipal police officers, firefighters and lifeguards) under a new state law.
- Continued development of a statewide EMS communications network, which now provides direct radio links between hospitals, ambulances, public safety agencies and other EMS providers in Boston, Fall River and Cape Cod; completed planning to extend such a system to Worcester and northern Worcester County.

HEALTH PLANNING

In the past year, the Office of State Health Planning (OSHP) strengthened its working relationships with other health-care organizations, and was actively involved in the development and implementation of a statewide health policy. OSHP worked with the Health Policy Group in formulating and coordinating a health policy for the state, and served on three subcommittees concerned with acute care, long-term care and ambulatory care.

The relationship between OSHP and the six Health Systems Agencies (HSA) continued during the year as the planning directors of the HSAs and OSHP worked on the regional Health Systems Plans. An HSP Uniform Format was approved by all the HSA Boards of Directors. Other key activities of OSHP staff relative to the HSAs included:

- Establishment of the State HSA Review Coordinators Committee, which has the responsibility for developing review protocols for Determination of Need applications, federal grants and for review of the appropriateness of applications and grants.
- Establishment of a State HSA Committee with the primary task of developing materials for public information and the educational needs of the HSAs.
- Review of HSA Quarterly Reports to determine conformance to standards, progress of the agency and other related activities.

The Office of State Health Planning also worked closely with the Rate Setting Commission, especially on the development of standards and criteria. A subcontract from the Commission permitted the OSHP to explore the relationship between rate setting and planning.

Coordination of activity between OSHP and the Department of Mental Health occurred in several areas:

- The organization of a Task Force to develop a format for the mental health/mental retardation component of the Health Systems Plans.

- The negotiation of a Memorandum of Understanding governing the administration of a joint Department of Public Health—Department of Mental Health education grant to provide training in the six health regions.

- The review of draft Medicaid policies on Medicaid reimbursements for neighborhood health centers, nutritional care, and nurse practitioners.

The Funds Flow Project, begun in 1975 as an attempt to describe and analyze health expenditures in Massachusetts both from state and federal sources, completed a comprehensive report on state health expenditures.

HEALTH STATISTICS

The Division of Health Statistics within the Office of State Health Planning is responsible for the collection of data on licensed health occupations, vital events, health facilities and long-term care. The Division also provides data for the health planning agencies in the state. During the past year, the Division recorded the following accomplishments:

- Processed and analyzed data for births, deaths, marriages and divorces, and published *Public Document No. 1*, the Annual Report of Vital Statistics, for calendar year 1976.
- Published the *Health Data Annual, 1976*, a statewide compilation of regional health-care data, prepared from the annual surveys of nursing homes, hospitals, home-care agencies, and residential care facilities; data on all licensed health professionals.
- Received \$250,000 in contracts from the National Center for Health Statistics for the Cooperative Health Statistics Program, which includes the Vital Events Program, the survey of health facilities and the survey of licensed health professionals.

EXPENDITURE REPORT
DEPARTMENT OF PUBLIC HEALTH
FISCAL YEAR 1976 - 1977 *

HEALTH PROGRAMS	STATE	FEDERAL	TOTAL
CENTRAL OFFICE			
Administration	\$744,135.16	\$1,091,297.62	\$1,835,432.78
Long-Term Care Information System	663,528.15	48,573.41	712,101.56
HEALTH REGULATIONS			
Long-Term	2,538,476.25	1,852,209.89	4,390,686.14
Certificate of Need	146,763.67	31,431.53	178,195.20
Dental Health	56,686.66	18,141.38	74,828.04
Hospital Facilities	75,476.67	473,135.51	548,612.18
HEALTH PROTECTION			
Tuberculosis Control	3,064,133.09	108,222.57	3,172,355.66
Communicable/Venereal Diseases	1,905,720.97	815,401.77	2,721,122.74
Food and Drugs	1,509,395.99	69,636.46	1,579,032.45
State Laboratory Institute	3,087,356.40	660,348.49	3,747,704.89
Preventive Medicine	261,853.67	940,171.62	1,202,025.29
HEALTH SERVICES			
Hospitals	40,201,894.14		40,201,894.14
Lakeville	4,827,841.12		
Lemuel Shattuck	9,262,968.73		
Mass. Hospital School	3,721,357.83		
Pondville	4,204,359.52		
Rutland Heights	4,260,007.82		
Tewksbury	10,600,632.49		
Western Massachusetts	3,324,726.63		
Division of Alcoholism	7,559,650.30	2,811,637.71	10,371,288.01
Family Health Services	5,157,093.01	9,782,015.18	14,939,108.19
TOTALS	\$66,972,164.13	\$18,702,223.14	\$85,674,387.27

* This report is based on a twelve month period for State expenditures (7/1/76 - 6/30/77) and Federal expenditures (10/1/76 - 9/30/77).

Organization Chart

1977

EXECUTIVE OFFICE OF HUMAN SERVICES
DEPARTMENT OF PUBLIC HEALTH

OFFICE OF THE COMMISSIONER



annual report 1977

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH